THE EFFECT OF METACOGNITIVE INSTRUCTION ON MAXIMIZING EFL LEARNERS’ METACOGNITIVE AWARENESS IN LISTENING

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Abstract

This study reports a pre-experimental research on the impact of metacognitive instruction on EFL learners’ metacognitive awareness and their listening performance. To obtain the goal of the study, a group of 30 Iranian intermediate EFL learners, including 14 males and 16 females, were selected randomly. Their ages range from 20 to 24. The participants took part in 16 weeks’ intervention program based on metacognitive pedagogical sequence consisted of five stages. The metacognitive awareness listening questionnaire (MALQ), and a listening test were also used to find changes in metacognitive awareness and listening performance before and after the treatment. The results of comparing pre and posttests scores revealed that metacognitive instruction raised the learners’ metacognitive awareness and helped them improve their listening comprehension ability.

KEYWORDS: METACOGNITIVE INSTRUCTION, LISTENING COMPREHENSION, METACOGNITIVE AWARENESS, METACOGNITIVE PEDAGOGICAL SEQUENCE

Introduction

Listening comprehension has got a crucial role in language learning. The complex nature of listening processing turns it to a big challenge and a source of frustration for language learners. We normally face poor learners’ performance as a result of inadequate attention to listening instruction in the classroom settings. Teachers majorly focus on the listening product than the listening process. For a long time, listening has been regarded as a passive skill and the learners do not have any active role in educational settings. Little attention has been given to the systematic practice in L2 listening, although listening skills have got a key role in successful negotiation and interaction. Second or foreign language learners are rarely taught how to listen effectively despite the fact that they were aware of the importance of this skill (Vandergrift, 2007).

One way to deal with this problem is teaching metacognitive strategies as a process-based approach to facilitate the process of listening for language learners. Metacognition is a construct that refers to human ability to be conscious of one’s mental process. Successful learners are aware of their learning processes and the use of different strategies due to different learning tasks and situations. Brown et al. (1983) mentioned that metacognitive knowledge and metacognitive strategies are two distinct components of the term metacognition. Metacognitive knowledge is dealing with the information learners acquire about their learning, and metacognitive strategies are general skills that lead learners to manage, direct, regulate, and guide their learning. Metacognitive strategies connecting new information to the old one can select effective thinking strategies and planning. Therefore, the learners have conscious control over their learning procedures. The aim of this study is to explore the effect of metacognitive instruction on the listening performance and metacognitive awareness of EFL learners in Iran.

Statement of the problem

The aim of this study was to raise metacognitive awareness of second or foreign language learners through metacognitive instruction to improve their listening skills. The lack of knowledge about the listening processing caused the pedagogical sequence to ignore this skill and its active role in improving learners’ capabilities in understanding the listening input. If the learners were taught about the cognitive, metacognitive and socio-affective strategies they learned how to think about their learning and these techniques were beneficial to the classroom settings.
The role of teachers is to equip learners with these techniques. As listening processing is a very complicated and abstract construct, it is very hard for the learners to understand its procedures easily. Explaining these procedures will enable the students to make use of them effectively and actively as active parties in communication. The major problem is ignoring that listening is teachable. There is an inadequate attention to listening instruction in the classroom or any other educational settings. One reason is the complexity of the nature of listening input itself, the external factors such as speed of the speech, the role of the interactants, the oral text and the implicit nature of listening and the difficulty in accessing the listening process. Besides, little attention has been given to the systematic practice in L2 listening, with its focus on listening process than listening product as second or foreign language learners are rarely taught how to listen effectively although they are aware of the importance of the skill.

Based on the research objectives, the following research questions have been raised in the study:

1-Does metacognitive instruction have any effect on the listening performance of EFL learners?

2-Does metacognitive instruction have any effect on the metacognitive awareness of EFL learners?

Statement of the hypotheses

H01: Metacognitive instruction does not have any effect on the metacognitive awareness of EFL learners.

H02: Metacognitive instruction does not have any effect on the listening performance of EFL learners.

Theoretical background

The concept of metacognition is driven from psychology. It simply means thinking about thinking. It is a kind of knowledge about one’s own cognitive processes. Flavell (1979) deconstructed the term metacognition into two components: 1-metacognition experience, and 2-metacognitive knowledge. Metacognitive experience is referring to the ability to consciously monitor and regulate one’s knowledge. Metacognitive knowledge is referring to beliefs about factors that interact during a cognitive activity. According to Flavell (1976), Metacognitive knowledge is divided into three types; person, task, and strategy knowledge. Person knowledge is the knowledge one has about oneself and it has an important role in the success or failure in one’s learning. Task knowledge is about the information about the task that one needs to know in order to do the tasks, and strategy knowledge is the knowledge about the effectiveness of techniques in achieving the goals. Learning outcomes are the result of the interaction of these three types of knowledge during the learning process.

Metacognitive instruction in listening increases the awareness of listening process. It develops the learners’ metacognitive knowledge about the nature of listening, the strategies of listening and about themselves as listeners. There are much evidence that supports the effectiveness of using metacognitive instruction for improving and facilitating successful language learning. Vandergrift and Goh (2012) maintain that metacognitive instruction can strengthen learners’ awareness and their listening process, which can assist learners in using appropriate strategies.

Vandergrift and Goh (2012) proposed a new model of metacognitive instruction, this model is known as” Metacognitive Pedagogical Sequence (MPS)”. The MPS model provides opportunities for learners to have dialogic interactions in negotiation, it is about the socio-cultural aspects of learning. It refers to two individual and social aspects of learning. In this process-based approach the learners enrich their learning through having interactions with peer dialogs and cooperation. The metacognitive pedagogical sequence has got five stages:
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Planning/Predicting stage, First verification stage, Second verification stage, Final verification stage and Reflection stage

The metacognitive instruction has got a great impact on the learners’ metacognitive awareness in listening in second and foreign language learning contexts.

**Listening Strategies**

Listening strategies are techniques for activities that contribute directly to the comprehension and recall for listening input. Listening strategies can be classified by how the listener processes the input.

**Top-down strategies are listener based**

In other words, the listeners tap into background knowledge of the topic, the situation or context, the type of text, and the language. The background knowledge activities are a set of expectation that help the listeners to interpret what is heard. Top-down strategies include: Listening for the main idea, predicting, drawing inferences and summarizing.

**Bottom-up strategies are text based**

The listeners rely on the language in the message, that is, the combination of sounds, words, and grammar that create meaning. Bottom-up examples are: Listening for specific details, recognizing word-order patterns.

**Interactive Processing**

This involves making use of both bottom-up and top-down processing. In this type of parallel processing, phonological, syntactic, semantic, and pragmatic information interact with each other.

Strategic listeners also use METACOGNITIVE STRATEGIES to plan, monitor, and evaluate their listening. They plan by deciding which listening strategies will serve best in a particular situation. They monitor their comprehension and the effectiveness of the selected strategies. They evaluate by determining whether they have achieved their listening comprehension goals and whether the combination of listening strategies selected was an effective one.

**Socio-affective Strategies**

Social/affective strategies are techniques listeners use to collaborate with others, to verify understanding or to lower anxiety. It is essential for listeners to know how to reduce anxiety, feel confident in doing listening task, and promote personal motivation in improving competence. The effective techniques are, questioning for clarification, cooperation, lowering anxiety, self-encouragement and taking emotional temperature.

**Listening for meaning**

To extract meaning from a listening text, students need to follow four basic steps: Figure out the purpose for listening. Activate background knowledge of the topic in order to predict or anticipate content and identify appropriate listening strategies.

Attend to the parts of the listening input that are relevant to the identified purpose and ignore the rest. This selectivity enables students to focus on specific items in the input and reduces the amount of information they have to hold in short-term memory in order to recognize it.

Select Top-down, Bottom-up or both of these two strategies that are appropriate to the listening task and use them flexibly and interactively. Students’ comprehension improves and their confidence increases when they use top-down and bottom-up strategies simultaneously to construct meaning.

Check comprehension while the listening and when the listening task is over. Monitoring comprehension helps
students to identify their weakness and direct them to use appropriate strategies.

Method

Research Design:

The research design was a pre-experimental study. We had two intact groups. The experimental and the control groups. The experimental group received the treatment and the control group did not receive any treatment. The method used for teaching the control group was based on the traditional model of teaching.

Participants

A group of 30, including 14 males and 16 females, intermediate Iranian EFL learners were selected. Their ages range from 20 to 24. They were selected from two different English institutes located in the Iranian capital of Tehran. All the participants had got pre IELTS certificates with scores above 60 out of 100. Two intact groups were used in the study. Random sampling was also utilized in this study. They were all undergraduate university students of different majors. The sample consisted of both junior and senior students.

Instruments

To check the homogeneity of the participants, Oxford Placement Test version 1 was used. It is validated by University of Cambridge Local Examination Syndicate. It has got three parts, part one has 40 questions, part two has 20 questions and the last part is writing section. The second instrument is the IELTS listening test used as the pre-test and post-test. It included 30 multiple choice items. The audio texts and the listening materials were adopted and validated by Examination papers from the University of Cambridge ESOL Examination, IELTS number 1.

The third instrument is pre and post questionnaires to access learners’ awareness and perceived use of listening strategies. Metacognitive awareness listening questionnaire (MALQ) was also used. The questionnaires were designed and validated by Vandergrift et al. (2006)

The MALQ consisted of 21 items covering five factors: problem-solving, planning and evaluation, mental translation, person knowledge, and direct attention. The items are arranged in the Likert Scale and the participants answered to each item by choosing one of these responses: strongly agree, agree, undecided, disagree or strongly disagree.

Procedures

The treatment was a 16 weeks’ program, it was based on Vandergrift and Goh (2017), Metacognitive Pedagogical Sequence (MPS). The learners encouraged to use dialogic interactions to negotiate metacognitive strategies they used while dealing with a listening task. Metacognitive instruction was not in practice for the learners in their normal classes throughout their education and they were taught listening merely through a cycle of pre-listening, listening and post-listening activities. The treatment program used in this study consisted of five stages.

Stage one: Planning and Predicting. Every session, learners were given a new listening task. They brainstormed the kinds of information they might heard, as well as any related vocabulary. They wrote their prediction. It helped them to understand planning.

Stage two: First verification stage. They listened for the first time to measure their prediction about the topics and words, took notes/monitored their prediction of the listening text, their initial understanding, and their peer listening
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performance. It helped the listeners to pay more attention to details as they exchanged their notes and understanding through dialogues.

Stage three: The second verification stage, the learners listened to the same text again. They paid attention to missed or misheard points, worked in pairs to resolve the difficulties, made corrections, took notes on any new information, developed in-depth understanding of the listening through dialogues helped them to identify their listening problems through monitoring strategy.

Stage four: Final verification. The learners listened to the same text for the third time which helped them to identify any mishearing or misunderstanding. They also realized new points they had not noticed during the first and second verification stage.

Stage five: The reflection stage. The stage helped them evaluate their use of metacognitive strategies during the listening tasks. They wrote down their personal reflection on a piece of paper.

The use of metacognitive pedagogical sequence, along with the listening tasks and dialogic interactions helped the listeners understand the use of metacognitive strategies. After the treatment the learners took part in the post-test and the post MALQ.

Data Collection

In this reach data were collected from four sources. The main focus of this study was the impact of listening strategy instruction on maximizing the learners’ metacognitive awareness and learners’ listening performance. The main data collection sources were pre-test, post-test, pre MALQ and post MALQ. The pre-test and post-test were IELTS 1,30 multiple choice items. They were validated by Examination papers from university of Cambridge ESOL Examination. The pre-test and post-test were identical but they were not the same to prevent the test practice effect. The pre and post MALQ were validated by Vandergrift et al. (2006) It was based on Likert Scale.

Data Analysis

For analyzing the quantitative data that were collected by the MALQ, t-test was used which also measures the variability between pre and posttest results. The mean was calculated for each factor to measure the degree of awareness for each factor. MALQ instrument contained five factors (planning and evaluation, problem solving, mental translation, person knowledge and directed attention). The data of pre and posttests were analyzed by a paired t-test to compare the mean scores of the participants before and after the strategy treatment. The mean scores of the experimental and the control groups were compared by descriptive statistics. It was computed by SPSS version 22.

Results

To investigate the effect of teaching metacognitive strategies on the listening performance of Iranian EFL learners, 16 weeks’ treatment of Metacognitive Pedagogical Sequence, (MPS) were conducted. The model was based on Vandergrift and Goh (2012). The process-based approach involved the instruction of metacognitive strategies in five phases.

In order to address the first research question and determine whether metacognitive strategy instruction has significantly resulted in improvement of the listening performance, it was decided to compare the mean scores of the IELTS posttests of both groups (the experimental and the control groups) by a paired t-test. All analyses were run by the SPSS.

In order to respond to the second question, the effect of metacognitive strategy instruction on Iranian EFL learners’ metacognitive awareness of listening, the quantitative data obtained from the MALQ were analyzed using t-test to measure variability between pre and posttest results. The MALQ instrument contained five factors (planning and evaluation, problem solving, mental translation, person knowledge and directed attention). The items related to each
of the five factors are listed in Table 4.

After transferring scores to the appropriate row, the mean was calculated for each factor to measure the degree of awareness for each factor. As can be seen from Table 5, the level of metacognitive awareness related to all five factors had significantly increased.

Table 1

*Summary Statistics for Investigating Equality of Means of Listening Performance in the Treatment Group and in the Control Group in the Pretest*

<table>
<thead>
<tr>
<th>Pretests</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment group</td>
<td>15</td>
<td>13.80</td>
<td>2.38</td>
<td>48</td>
<td>28.98</td>
</tr>
<tr>
<td>Control group</td>
<td>15</td>
<td>14.12</td>
<td>1.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2

*Summary Statistics for Comparison of the Pretest Measures of Listening Performance in the Treatment Group and in the Control Group*

<table>
<thead>
<tr>
<th>Pretests</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment group</td>
<td>15</td>
<td>13.80</td>
<td>2.38</td>
<td>24</td>
<td>11.4</td>
</tr>
<tr>
<td>Control group</td>
<td>15</td>
<td>14.12</td>
<td>1.69</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 3

*Summary Statistics for Comparison of the Posttest Measures of Listening Performance in the Treatment Group and in the Control group*

<table>
<thead>
<tr>
<th>Posttest</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>df</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment group</td>
<td>15</td>
<td>17.24</td>
<td>2.38</td>
<td>48</td>
<td>28.98</td>
</tr>
<tr>
<td>Control group</td>
<td>15</td>
<td>14.70</td>
<td>1.90</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 4 Factors of MALQ and Their Related Items

<table>
<thead>
<tr>
<th>MALQ</th>
<th>n(items)</th>
<th>Items no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planning and evaluation</td>
<td>5</td>
<td>1,10,14,20,21</td>
</tr>
<tr>
<td>Problem solving</td>
<td>6</td>
<td>5,7,9,13,17,19</td>
</tr>
<tr>
<td>Mental translation</td>
<td>3</td>
<td>4,11,18</td>
</tr>
<tr>
<td>Person knowledge</td>
<td>3</td>
<td>3,8,15</td>
</tr>
<tr>
<td>Directed attention</td>
<td>4</td>
<td>2,6,12,16</td>
</tr>
</tbody>
</table>

Table 5 Statistical Summary of MALQ Factors for the Treatment Group in the Pre- and Posttest

<table>
<thead>
<tr>
<th></th>
<th>Pretest Mean</th>
<th>Pretest SD</th>
<th>Posttest Mean</th>
<th>Posttest SD</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Problem solving</td>
<td>10.05</td>
<td>3.17</td>
<td>14.26</td>
<td>3.40</td>
<td>3.27</td>
</tr>
<tr>
<td>Mental Translation</td>
<td>10.29</td>
<td>2.54</td>
<td>11.07</td>
<td>3.42</td>
<td>1.38</td>
</tr>
<tr>
<td>Planning and Evaluation</td>
<td>11.76</td>
<td>3.46</td>
<td>14.04</td>
<td>3.49</td>
<td>2.98</td>
</tr>
<tr>
<td>Person knowledge</td>
<td>12.34</td>
<td>3.22</td>
<td>13.20</td>
<td>2.63</td>
<td>1.98</td>
</tr>
<tr>
<td>Directed attention</td>
<td>10.68</td>
<td>2.52</td>
<td>12.05</td>
<td>3.36</td>
<td>2.54</td>
</tr>
</tbody>
</table>

Conclusion

According to the outcomes of the statistical analysis, metacognitive strategy instruction can significantly improve listening performance among EFL learners and raise their metacognitive awareness of the processes involved during listening task. This study provides empirical support to the body of knowledge in the field of metacognitive strategies in listening. The results of the study indicate that learners find strategy instruction facilitative in terms of decreasing their stress level due to applying planning strategies. It can also make them independent and self-regulated to use these techniques to monitor and evaluate their learning. Knowing some successful tactics and
strategies to do listening tasks give them a sense of confident and support in dealing with a skill as challenging and implicit as listening. Thus, students take responsibility of their own learning through the cycle of planning, monitoring and evaluation.

Statistical analysis of the IELTS and MALQ demonstrated that differences between pretests and posttests in the experimental group are statistically significant. Also, since the control group did not show any significant improvement in its performance, the outperformance of the experimental group is as a result of the metacognitive instruction. The majority of the learners perceived metacognitive strategies made them more self-assured and helped them to relieve themselves of the tension of getting lost in the stream of fast speed conversation.

Before strategy instruction, the learners had neglected the importance of directed attention but metacognitive knowledge made them more aware of this technique. It is perceived that metacognitive strategy instruction changed the attitude of the EFL learners to the listening skill and emphasized a process-oriented rather than product-oriented approach.

Finally, the results of this investigation indicate the necessity for language teachers, especially in Iran, to pay more attention to a strategic approach to the listening task in classrooms and replace product-oriented with process-oriented instruction of listening which focuses on strategy instruction and enabling the learners to effectively extract content information from input.

Based on the results of this study, the two null hypotheses were rejected, and the metacognitive instruction had a very significant effect on the listening performance of EFL learners and also, the metacognitive instruction had a very important effect on the metacognitive awareness of EFL learners.

References


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Appendices:

A metacognitive pedagogical sequence for listening (based on Vandergrift, 2004).
THE EFFECT OF METACOGNITIVE INSTRUCTION ON MAXIMIZING EFL LEARNERS' METACOGNITIVE AWARENESS IN LISTENING

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**Metacognitive Awareness of Listening Questionnaire (MALQ)**

<table>
<thead>
<tr>
<th>I like learning another language</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Slightly disagree</th>
<th>Partly agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>1. Before I start to listen, I have a plan in my head for how I am going to listen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>2. I focus harder on the text when I have trouble understanding.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3. I find that listening is more difficult than reading, speaking, or writing in English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4. I translate in my head as I listen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5. I use the words I understand to guess the meaning of the words I don't understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6. When my mind wanders, I recover my concentration right away.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7. As I listen, I compare what I understand with what I know about the topic.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8. I feel that listening comprehension in English is a challenge for me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9. I use my experience and knowledge to help me understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10. Before listening, I think of similar texts that I may have listened to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11. I translate key words as I listen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12. I try to get back on track when I lose concentration.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>13. As I listen, I quickly adjust my interpretation if I realize that it is not correct.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>14. After listening, I think back to how I listened, and about what I might do differently next time.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>15. I don't feel nervous when I listen to English.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>16. When I have difficulty understanding what I hear, I give up and stop listening.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>17. I use the general idea of the text to help me guess the meaning of the words that I don't understand.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>18. I translate word by word, as I listen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>19. When I guess the meaning of a word, I think back to everything else that I have heard, to see if my guess makes sense.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>20. As I listen, I periodically ask myself if I am satisfied with my level of comprehension.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>21. I have a goal in mind as I listen.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>

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**Metacognitive strategies**
- Planning: advanced organization, directed attention, selective attention, self-management
- Monitoring: comprehension monitoring, auditory monitoring, double-check monitoring
- Evaluation: performance evaluation, problem identification

**Cognitive strategies**
- Inferencing: linguistic, voice, paralinguistic or kinesthetic, extra-linguistic, inferencing between parts
- Elaboration: personal, world, academic, questioning, creative, imagery
- Summarization
- Translation
- Transfer
- Repetition
- Resourcing
- Grouping
- Note-taking
- Deduction/Induction
- Substitution

**Socioaffective strategies**
- Questioning for clarification
- Cooperation
- Lowering anxiety
- Self-encouragement
- Taking emotional temperature

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